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## Bend Aero Modelers



### FLIGHT REPORT

DECEMBER 2013/JANUARY 2014

# BAM'S ANNUAL CHRISTMAS PARTY 2013!



Approximately 30 people attended this year's BAM Christmas Party hosted by Tim and Cheryl Peterson in their lovely home just East of Bend. Some people were unable to attend due to weather conditions but those that did attend were rewarded with good food, good conversation and good company. The annual event was enhanced by a surprise visit with Santa Clause who helped with the distribution and refereeing of the gift exchange/theft game. The cold weather put a chill in the air....-20 when we left the party.....but it was warm inside.....especially with our cordial hosts' hospitality. Thanks so much Tim and Cheryl!!! More pictures of this event can be found inside.

### **Next Meeting**



January 22, 2014 6:30 pm at Jake's Diner

Food available come early to visit and eat.

### FROM THE EDITOR



### by Andy Niedzwiecke

Well, club elections are over, the Christmas party is over, Christmas is over and it's a New Year. I'm sure that a lot of people are proud owners of new models or thinking about the models that they are going to buy with Christmas gift money. We had a great 2013, what with getting the clubhouse work done and the cement work done and a new stove installed!

On a recent trip out to the field, it was noticed that some of the pit fabric has deteriorated to the point that it will have to be replaced in the near future. We are also going to be looking for a storage building (or building one) to store the stuff (junk) that normally occupies space in the clubhouse so there will be more room for people to congregate. If you have one or know of one that could be had for a reasonable price, please let us know.

All in all we have come far as a club. A real sense of camaraderie has grown over the last couple of years, which makes for a welcoming environment. We have had people new to the hobby who have enjoyed help to get started in RC aviation, both at our field and at the Park Flying sessions during the Summer. The diversity of interests in our club is also a real plus. Whether we favor glow, gas, electric, jets, building, ARF's, foamies or helicopters and quad-copters, we always have someone else with whom to share the same interest. I know that I said that I would not ever be interested in electric's but I discovered how much fun and how convenient they can be and I am thoroughly enjoying this new (to me) part of the hobby. We also have a member that is dabbling in aerial photography. We look forward to some of his work appearing on the club website soon. Our website is also something that this club can be proud of, thanks to the efforts of BAM president, Waldemar Frank. We have lured several interested parties out to our field just because of the website! We have welcomed new youth participants. The successful Club 40 seasons are continuing to grow. Who knows where our club will go in 2014, but with the momentum that has been steadily building we think that we will continue to grow and welcome many new members in the new year. See you all at the January meeting!



### NEW MEMBERS



Say Hello to our newest member, Joe Stone! Joe really is not a stranger to BAM members because he attends most of our events. He has been an active participant in the Club 40 Races and at our latest Firecracker event he put on some impressive aerobatics with his giant scale planes. He is also responsible for the installation of our new clubhouse stove including labor and materials. He goes camping with some of our members and has attended a couple of meetings this last year. We look forward to seeing his face and planes at our field in the coming year and extend a very warm welcome and a big thank you to Joe Stone! Welcome to BAM Joe.

# FROM THE PRESIDENT



### Message from the President

### by Waldemar Frank

Dear Members, Fellow RC Pilots, and Interested Readers:



It has been colder these past few weeks and with the first snow of the season, winter has officially arrived in Central Oregon. Luckily we completed our club house project just in time, including the installation of our new wood stove. So any members who are up for some winter flying should find a warm place inside the club house.

There is also an upcoming winter flying opportunity at Field of Dreams of Redmond. You may recall their annual Polar Bear Fly-In, which takes place on January 1<sup>st</sup>. It would be great to see some of our members attend the event if possible (or just come and watch if you prefer). I attended the past two years and it is usually a laid-back, fun activity with a small potluck. Further, our friends from the La Pine R/C Flyers offer weekly indoor flying, which you might also enjoy. For details, please refer to our *News* section on our website at: http://www.bamrc.com/news.html#n1312\_01

Also, I would like to formally announce that the membership renewal period has started and members are welcome to submit their club renewal checks to Tom Schramm, our Treasurer. Please make checks payable to "BAM" and mail them to Tom at:

Bend Aero Modelers c/o Tom Schramm 20557 Rusticate Rd. Bend, OR 97702

All 2013 memberships expire on December 31, 2013. As usual there is a renewal grace period, which ends on March 1st (last day to renew). If you need additional time to complete your renewal, please reach out to Tom or me so we can make any necessary arrangements to accommodate your specific situation.

Moving on to a different subject—there has been a recent announcement by AMA and the *Federal Aviation Administration* (FAA) concerning *Unmanned Aircraft Systems* (UAS). You may recall the ongoing discussions for the past several years about the use of UAS and its impact on privacy rights as well as the *National Airspace System* (NAS). In general, the FAA endorses AMA's safety guidelines for personal use of *small UAS* (sUAS).

A response by Bob Brown, President of AMA, can be accessed here: <a href="http://amablog.modelaircraft.org/amagov/2013/11/08/ama-response-to-faas-uas-integration-roadmap/">http://amablog.modelaircraft.org/amagov/2013/11/08/ama-response-to-faas-uas-integration-roadmap/</a>

The response does not include specific details and just implies that AMA will expand its safety program to accommodate a growing number of sUAS hobbyists and will continue to collaborate with the FAA to ensure safety.

The recent publication of the FAA's roadmap for integration of UAS focuses on the commercial, government and military use of such systems. For details, please refer to FAA's press release from November 7: http://www.faa.gov/news/press\_releases/news\_story.cfm?newsId=15334

A copy of the UAS integration roadmap is available at the following link: <a href="http://www.faa.gov/about/initiatives/uas/media/UAS\_Roadmap\_2013.pdf">http://www.faa.gov/about/initiatives/uas/media/UAS\_Roadmap\_2013.pdf</a>
It does not contain specific details for sUAS and its application to our hobby. However, this does not mean that future changes and introduction of guidelines will not affect our hobby in the long term. Given the nature of this technology and emerging potential (and a lack of experience regarding privacy), we should anticipate some regulatory framework for our hobby that will at a minimum address privacy rights—a development that we have already seen across many states, including Oregon.

For now, though, we can continue to fly our airplanes and use video equipment for recreational use.

Happy Holidays! Sincerely, Waldemar Frank BAM President



#### **Academy of Model Aeronautics**

5161 East Memorial Drive, Muncie IN 47302-9252 (765) 287-1256 • Fax (765) 289-4248 • www.modelaircraft.org

Bend Aero Modelers Frank Waldemar 19750 Clarion Ave Bend, OR 97702

To the members of the Bend Aero Modelers,

On behalf of the Academy of Model Aeronautics and the members of District 11, I would like to thank you for participating in the inaugural National Model Aviation Day. With your help, the event was a success! Not only did 176 AMA chartered clubs across the country sign up to participate, but \$76,000 was collected to support the Wounded Warrior Project. Also, five states—Missouri, Virginia, Alabama, Michigan, and Indiana—all received state proclamations for the occasion.

As one of our first-year participants, we want to share next year's event details with you. The AMA Executive Council and staff have worked together to set a date for next year and to select a charity. The 2014 date will be August 16, 2014. Like this year, clubs can celebrate National Model Aviation Day on other dates if events are already scheduled, but this is the official date. The Wounded Warrior Project has again been selected as the charity the event will support. Many clubs across the country have expressed the desire to assist this charity again because of its solid mission. Donations to the organization help more than one million wounded veterans across the country.

All clubs that register for the 2014 National Model Aviation Day will receive support materials to share with event attendees. Your club will receive details on this after you register.

Details about next year's event will be on the National Model Aviation Day website, <a href="https://www.nationalaviationday.org">www.nationalaviationday.org</a>. Please continue to monitor this website, <a href="https://www.nationalaviationday.org">AMA Today</a>, and the AMA blogs for updates.

Mike Mosbrooker, District XI Vice President

### National Model Aviation Day August 17, 2013



# Certificate of Participation

This is to certify that

### Bend Aero Modelers

Participated in the inaugural National Model Aviation Day, August 17, 2013, in support of the Wounded Warrior Project.



Thank you for your continued support of the Academy of Model Aeronautics and aeromodeling.

Bob Brown AMA President

AMA President, Bob Brown, today presented Cindy Parsons from the Wounded Warrior Project with a check for \$76,000, the proceeds from the inaugural National Model Aviation Day.

To celebrate the storied history of model aviation, 176 chartered clubs across the country participated in National Model Aviation Day on August 17, 2013, which was established to celebrate and promote the hobby and to support a great cause, which was this year the Wounded Warrior Project.

Thank you to all of the chartered clubs that celebrated the hobby we love, introduced model aviation to friends, family, and community members, and supported the Wounded Warrior Project!

For more information about National Model Aviation Day, please visit www.modelaircraft.org/nmad.aspx.



### **EXECUTIVE COMMITTEE MEETING**

Since we have several new members and there has been some confusion in the past, the EC would like to clarify the membership renewal process:

#### January club meeting:

To remain an active club member, membership renewals must be received prior to or by the January club meeting (per the by-laws).

#### March 1<sup>st</sup>:

To avoid loss of membership, membership renewals must be received by March 1<sup>st</sup> of the current renewal period at the latest. Members who require additional time for paying their dues due to hardship should contact the club president by March 1<sup>st</sup> to avoid loss of membership (we will work with you as appropriate to accommodate your situation).

For a copy of the by-laws, please refer to the club website under **Resources/Club Documents** at:

#### http://www.bamrc.com/resources/resources 00.html

For questions, please contact the club president (at <u>president@bamrc.com</u> or 541-330-5508). Sincerely,

#### Your EC

#### 2. Dues and Assessments:

The annual dues to be paid to the Club shall be determined by the Club officers with the approval of a simple majority vote of members present at a general monthly meeting. Dues are non-refundable, except under extraordinary circumstances, which will be determined on a case-by-case basis, by the executive committee. Dues per annum shall be payable on or before the date of the January meeting, with loss of membership if not paid by March 1st. New members joining after April 1st shall have their dues pro-rated for the time remaining in that year. Current members, or membership renewals are not eligible for pro-rated dues, and will be responsible for the full dues amount. The required initiation fee is not subject to pro-rating, and must be paid in full. No special assessment shall be levied upon the Club membership, unless approved by a vote of two-thirds (2/3) majority of the members present at the regular monthly meeting, and the members have been given five (5) days prior notice along with an explanation of the assessment.

There is an inventory or shirts and hats on hand that we have had for quite a while. We are having an end of year/beginning of year sale to promote the sale of our old inventory. The T-shirt mentioned below is available for \$5.00 and the polo shirts are available for \$15.00 and hats for \$13.00. If anyone is interested in the blemished polo shirt they can have it for

### Currently we have the following:

16 hats, khaki color, with embroidered logo and BAM name

1 T-shirt, medium, white (with silk screen logo)

1 Polo shirt, small adult, gray, with embroidered logo and BAM name (slight red color blemish on logo)

7 Polo shirts, large adult, gray, with embroidered logo and BAM name

2 polo shirts, extra-large adult, pale yellow, with embroidered logo and BAM name

The next page contains the proposed calendar for the 2014 season. There are some interesting events planned for the year including the Club 40 Racing events and the "Fun Fly" competition in October. Please review the calendar and make sure that you reserve the dates so you can attend. We are planning on having a great year and don't want you to miss a single thing.



#### Bend Aero Modelers - 2014 Event Calendar



January										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
1				1	2	3	4			
2	5	6	7	8	9	10	11			
3	12	13	14	15	16	17	18			
4	19	20	21	22	23	24	25			
5	26	27	28	29	30	31				

January 1st - New Year's Day

	February										
Week	Veek Sun Mon Tue Wed Thu Fri Sa										
5							1				
6	2	3	4	5	6	7	8				
7	9	10	11	12	13	14	15				
8	16	17	18	19	20	21	22				
9	23	24	25	26	27	28					

	March										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
9							1				
10	2	3	4	5	6	7	8				
11	9	10	11	12	13	14	15				
12	16	17	18	19	20	21	22				
13/14	23/30	24/31	25	26	27	28	29				

April											
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
14			1	2	3	4	5				
15	6	7	8	9	10	11	12				
16	13	14	15	16	17	18	19				
17	20	21	22	23	24	25	26				
18	27	28	29	30							

April 20th - Easter Day

	May											
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat					
18					1	2	3					
19	4	5	6	7	8	9	10					
20	11	12	13	14	15	16	17					
21	18	19	20	21	22	23	24					
22	25	26	27	28	29	30	31					

May 11th - Mother's Day / May 26th - Memorial Day May 17th - Pylon Race at Popp's Field/BAM

	June											
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat					
23	1	2	3	4	5	6	7					
24	8	9	10	11	12	13	14					
25	15	16	17	18	19	20	21					
26	22	23	24	25	26	27	28					
27	29	30										

June 15th - Father's Day June 21st - Pylon Race at Dorrance Meadow/La Pine

July										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
27			1	2	3	4	5			
28	6	7	8	9	10	11	12			
29	13	14	15	16	17	18	19			
30	20	21	22	23	24	25	26			
31	27	28	29	30	31					

July 4th - Independence Day July 26th - Pylon Race at FOD/Redmond

У			
Wed	Thu	Fri	Sat
2	3	4	5
9	10	11	12
16	17	18	19
23	24	25	26
30	31		

October											
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
40				1	2	3	4				
41	5	6	7	8	9	10	11				
42	12	13	14	15	16	17	18				
43	19	20	21	22	23	24	25				
44	26	27	28	29	30	31					

	August										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
31						1	2				
32	3	4	5	6	7	8	9				
33	10	11	12	13	14	15	16				
34	17	18	19	20	21	22	23				
35/36	24/31	25	26	27	28	29	30				

August 30th - Pylon Race at Popp's Field/BAM NOTE: Due to a scheduling conflict with Jake's Diner the August meeting is on a TUESDAY.

Augus	November											
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat					
44							1					
45	2	3	4	5	6	7	8					
46	9	10	11	12	13	14	15					
47	16	17	18	19	20	21	22					
48/49	23/30	24	25	26	27	28	29					

November 27th - Thanksgiving Day NOTE: Due to Thanksgiving and a scheduling conflict with Jake's Diner the November meeting is a week earlier and on a TUESDAY.

	September										
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
36	31	1	2	3	4	5	6				
37	7	8	9	10	11	12	13				
38	14	15	16	17	18	19	20				
39	21	22	23	24	25	26	27				
40	28	29	30								

September 1st - Labor Day

December							
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
49		1	2	3	4	5	6
50	7	8	9	10	11	12	13
51	14	15	16	17	18	19	20
52	21	22	23	24	25	26	27
1	28	29	30	31	1		

December 24th - Christmas Eve December 25th - Christmas Day December 31st - New year's Eve January 1st - New Year's Day

# FIELD TLC AND ETIQUETTE

I thought I'd continue this section for another month or so just to plant some seeds for thought in our members. We have worked hard over the last couple of years to clean up and repair our facility and now that we are guaranteed 20 years at this site we should establish some reasonable procedures for continuing to improve and maintain our facility so that it is enjoyable and attractive.



We now have a new stove...new to us...and it has been installed and is waiting for it's maiden voyage. If anyone ever has some spare lumber or firewood, it would be good to bring it to the field so that we can establish a woodpile that will keep us going in our heating efforts.

The interior is now done and painted and we will soon be installing shelving in order to make more room for sitting and visiting. We also have a table and a few chairs. The object is to keep supplies off of the floor and out of the way so we can use the clubhouse for people without having to dodge stuff.

One point that needs to be made is that if you have something you think would benefit the members for the clubhouse, please check with the officers before delivering it to the field. Too often, members just dump stuff that will not be used or can't be used and we end up having to take those items to the dump.

We have already established that the first person to the field should open the gates and raise the flag. In addition that person should open the lockbox in the clubhouse so that the newly installed fire extinguisher and first aid kit is readily available in case of emergencies. The inverse is true for all of the above if you are the last one leaving the field. I know this has been mentioned before but this is just a reminder.

There is still some inclination to fly or land in the area behind the pilot stations by some. This is not an acceptable practice in any instance and should be avoided before we get someone hurt.

Unless someone has anything to cover under this section, this will probably be my last comments on this subject.

Take care and have fun! Andy

# HANDY TIPS AND INFO



### Tom Schramm offers this tip:

I have been using mechanic's sockets, 3/8" or  $\frac{1}{2}$ " drive, either deep or standard style, for holding wing ribs or fuselage formers at 90 degrees.

Use ½" or larger size for their weight factor. Socket bottom edge is radius to eliminate excess adhesive from sticking to the socket. Use one on each side of the part is usually sufficient.

Also, I will use a carpenters level with additional weight, long enough to hold down trailing edge sheeting, spars, or leading edge sheeting where it attaches to the spars. This makes for a straight wing from root to tip.

Also..... lead shot bought in bulk could also be used. Ingenuity is the answer.

Merry Christmas



Well to say we had a good time at the Christmas party would be an understatement! There was lots of laughter, chatter, gift stealing and just generally good old fashioned fun. Those that weren't able to attend this year should put the date on your calendar for next year which is usually the first Saturday in December. I have put together a collage' of the happenings for you to enjoy. HOPE YOU HAD A MERRY CHRISTMAS AND HAVE A HAPPY NEW YEAR!



### SHOW & TELL





Ron Plomer gave a brief but interesting presentation about using bicycle spokes as control surface push-rods because they have a threaded end they are very usable for that application.

Bill Hand gave a presenta- tion about using solderless wire terminations. Here are some of his comments:

I have converted almost all my connectors to Anderson Powerpoles.

#### Things I like:

- 1. Once you get a system down, they are easy to install
- 2. Since they are "flip to fit", it is easy to get the polarity correct
- 3. They connect to each other smoothly.
- 4. They can be assembled using a standard crimping tool, but the tool made for the connectors makes a cleaner attachment.

#### Things I don't like:

- 1. Inserting the metal clip into the plastic body is difficult if the wire is flexible or soft. I now use a small set of needle nose pliers to make the connection. Works great.
- 2. Although the metal clips are solderless, they can be pulled apart if you try to disconnect the plugs by pulling on the wires. a small drop of solder on the finished crimped connection cures this.

Log on to modelaviationnews.com. Follow the video link. View the video on connectors to see how it all goes together.







Andy Niedzwiecke is busy with many winter projects including this Seagull Model's A6M Zero ARF. This plane has been discontinued so he is glad he bought it when he did. The plane spans 67" and is expected to weigh 9+ pounds when complete. It features split flaps and mechanical retracts. Andy is installing an OS 120 pumped four-stroke along with a 3-bladed prop. This plane may be ready for this summer but given that there are many other projects going on, nothing is for certain at this time.

# BOB'S BIG AD-VENTURE 60



Member Bob Ingram is embarking on his first ever building experience! He is not new to RC modeling but has never built an airplane so this is a "big first" for him. He chose an excellent project in the Bruce Tharpe design Venture 60. Several members have this model....still in the box.....so some day maybe there'll be a squadron of these planes. Enough of that.....let's see where Bob is going to begin,





#1 Building Area



#2 Box Arrived



#3 Box Opened



For those of you who are unfamiliar with the Venture 60, here is a good representation of this great plane!



A happy Bob! His first wing panel under construction.



Bob selected a Thunder Tiger FS75 four-stroke engine for his project.....good choice!



#4 Inventory ALL the pieces

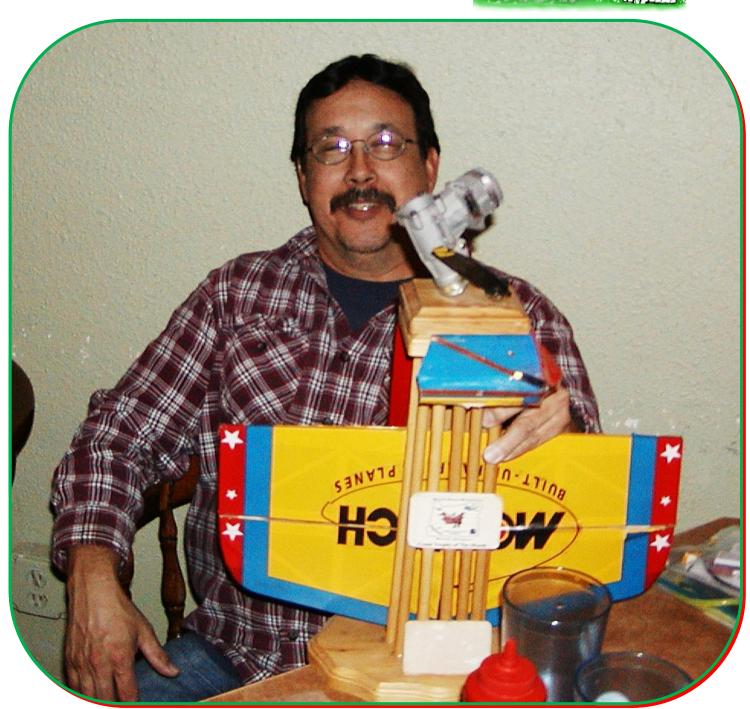
Stay tuned for more reports on this project!



#5 Begin building...the instructions state to build the wing first so that is where I'm going to begin. Now I need to locate an engine....it is needed in the first step of the fuselage.

# OBITUARIES Rest In Pieces





Although there were no reported crashes for this issue, Darrell Loveland got the Crash Trophy for his handi-work at the last two Club 40 Pylon Races. Folks are a bit apprehensive about the coming season and Darrell's race tactics.

# MEMORIES FROM 2004



Member Jim Young sent me these pictures from October 3, 2004 and asked if I could put them in the newsletter. Here Ya go Jim!



**Darrell Loveland** 



Andy Niedzwiecke



Mark Rose a former BAM president



Kim Waterhouse

# BAM Bulletin Board



## SAFETY REPORT





Hello To All My Friends,

As many of you know I am the new Safety Officer. I would like to introduce myself for those who are new to the club.

I have been building and flying R/C since I was about 12 years old, I am now 49. I have taken many breaks in between due to burnout, marriage etc. My first airplane was a Sig Kadet with a futaba radio. The radio had no programming or any of the bells and whistles of today's equipment. To reverse a servo you had to buy a reverse servo (Darn I feel old all of a sudden). I have pictures of some of my history I will bring to the next meeting.

My main interest is Air Racing, it is an absolute adrenaline rush. Try it you will love it. I also enjoy Scale Aerobatics, Scale Airplanes, mostly WW2 and Golden Age type. On the building bench are several projects- A delta wing called Screamin Demon, Hawker Sea Fury, and to be started a Hughes H-1. Plus others as time allows.

I am an Instructor for BAM and Redmond FOD. If you need help with your flying or questions about building just ask, I will be happy to help.

With winter on us we are bundled up in coats, gloves and hats etc. Pay attention to what is hanging off of your clothing. The spinning prop can grab and cause harm. Just use your brains and we will be safe. Stay warm and have a MERRY CHRISTMAS.

Bruce Burgess 541-279-1486 ke6qkc@ykwc.net

## SAFETY REPORT





Thanks to Tom and Diana Schramm, our remodeled club house has a new frequency pin board. For those of you that are still using the 72mhz frequencies in your planes please be sure to do this: BEFORE you turn on your transmitter check to see if your frequency is available and if so take the pin and leave your AMA card on the board. A hole punch will be available if your card does not already have a hole. Please return the pin when you are not flying or working on your plane so the frequency will be available to others that need it. Even if you are at the field alone be sure to follow this practice because you never know when someone will show up at the field and have the same equipment that you do. Thanks to all for your cooperation in making this a safe site to fly at!



#### POPP'S FIELD SAFETY GUIDELINES

All pilots shall be current members of A.M.A. and B.A.M. Proof of current A.M.A. membership is required prior to flying at B.A.M.

Visiting A.M.A. pilots and new members of B.A.M shall receive a safety orientation prior to their first flight.

Pilots shall ensure safe flight operations in concordance with A.M.A. Safety Rules and these Field safety Guidelines.

Pilots shall ensure safe operation of their aircraft and associated equipment prior to use.

Pilots are encouraged to verbally enforce safe flying practices.

All guests, children, and pets shall be supervised by a B.A.M. member while inside the flying field and are encouraged to remain behind the pit tables.

All pilots shall restrain their aircraft during the start-up/arming process. This includes electrics.

Pilots shall never leave their aircraft unattended while the aircraft is running or armed..

Pilots shall only taxi aircraft in the specified taxi area and use caution while taxiing.

While flying, pilots are encouraged to remain 25 feet behind the closest edge of the runway, preferably behind a pilot station.

Pilots shall verbally communicate their intensions such as landings, take-offs, or aircraft problems while flying.

Pilots shall fly their aircraft north of the centerline of the runway. This is known as the "deadline".

Pilots only are permitted beyond the flight line (e.g., to retrieve an aircraft)

Landing aircraft have the right of way. Dead-stick landings shall be announced as such and given full priority.

Pilots shall communicate any aerobatic maneuvers such as, low passes, touch and go's, and hovering directly near or above the runway.

Pilots shall not take-off or land on the taxiways.

A maximum of five (5) aircraft is allowed in the air at one time. This includes helicopters and micros.

Pilots shall call all maiden flights prior to flight. All other aircraft shall be grounded throughout the entirety of the flight.

Hand launches shall be performed approximately 25 feet from the edge of the runway closest to the pilots' station.

Pilots using AM/FM radio equipment shall have the appropriate frequency pin attached to the transmitter antenna whenever the radio is in use.

R/C cars and other surface vehicles are prohibited anywhere inside the flying field.

Smoking is prohibited anywhere inside the flying field and shall be carried out in a safe and respectful manner in the parking lot.

The consumption of alcoholic beverages before or during flight is prohibited.

### Academy of Model Aeronautics National Model Aircraft Safety Code, Effective January 1, 2011

A. GENERAL: A model aircraft is a non-human-carrying aircraft capable of sustained flight in the atmosphere. It may not exceed limitations of this code and is intended exclusively for sport, recreation and/or competition. All model flights must be conducted in accordance with this safety code and any additional rules specific to the flying site.

- 1. Model aircraft will not be flown:
  - (a) In a careless or reckless manner.
  - (b) At a location where model aircraft activities are prohibited.
- 2. Model aircraft pilots will:
  - (a) Yield the right of way to all man carrying aircraft.
  - (b) See and avoid all aircraft and a spotter must be used when appropriate. (AMA Document #540-D-See and Avoid Guidance.)
  - (c) Not fly higher than approximately 400 feet above ground level within three (3) miles of an airport, without notifying the airport operator.
  - (d) Not interfere with operations and traffic patterns at any airport, heliport or seaplane base except where there is a mixed use agreement.
  - (e) Not exceed a takeoff weight, including fuel, of 55 pounds unless in compliance with the AMA Large Model Aircraft program. (AMA Document 520-A)
  - (f) Ensure the aircraft is identified with the name and address or AMA number of the owner on the inside or affixed to the outside of the model aircraft. (This does not apply to model aircraft flown indoors).
  - (g) Not operate aircraft with metal-blade propellers or with gaseous boosts except for helicopters operated under the provisions of AMA Document #555.
  - (h) Not operate model aircraft while under the influence of alcohol or while using any drug which could adversely affect the pilot's ability to safely control the model.
  - (i) Not operate model aircraft carrying pyrotechnic devices which explode or burn, or any device which propels a projectile or drops any object that creates a hazard to persons or property.

#### Exceptions:

- Free Flight fuses or devices that burn producing smoke and are securely attached to the model aircraft during flight.
- Rocket motors (using solid propellant) up to a G-series size may be used provided they remain attached to the model during flight. Model rockets may be flown in accordance with the National Model Rocketry Safety Code but may not be launched from model aircraft.
- Officially designated AMA Air Show Teams (AST) are authorized to use devices and practices as defined within the Team AMA Program Document (AMA Document #718).
- (j) Not operate a turbine-powered aircraft, unless in compliance with the AMA turbine regulations. (AMA Document #510-A).
- 3. Model aircraft will not be flown in AMA sanctioned events, air shows or model demonstrations unless:
  - (a) The aircraft, control system and pilot skills have successfully demonstrated all maneuvers intended or anticipated prior to the specific event.
  - (b) An inexperienced pilot is assisted by an experienced pilot.
- 4. When and where required by rule, helmets must be properly worn and fastened. They must be OSHA, DOT, ANSI, SNELL or NOCSAE approved or comply with comparable standards.

#### B. RADIO CONTROL (RC)

- 1. All pilots shall avoid flying directly over unprotected people, vessels, vehicles or structures and shall avoid endangerment of life and property of others.
- 2. A successful radio equipment ground-range check in accordance with manufacturer's recommendations will be completed before the first flight of a new or repaired model aircraft.
- 3. At all flying sites a safety line(s) must be established in front of which all flying takes place (AMA Document #706-Recommended Field Layout):
  - (a) Only personnel associated with flying the model aircraft are allowed at or in front of the safety line.
  - (b) At air shows or demonstrations, a straight safety line must be established.
  - (c) An area away from the safety line must be maintained for spectators.
  - (d) Intentional flying behind the safety line is prohibited.
- 4. RC model aircraft must use the radio-control frequencies currently allowed by the Federal Communications Commission (FCC). Only individuals properly Licensed by the FCC are authorized to operate equipment on Amateur Band frequencies.
- 5. RC model aircraft will not operate within three (3) miles of any pre-existing flying site without a frequency-management agreement (AMA Documents #922-Testing for RF Interference; #923- Frequency Management Agreement)
- 6. With the exception of events flown under official AMA Competition Regulations, excluding takeoff and landing, no powered model may be flown outdoors closer than 25 feet to any individual, except for the pilot and the pilot's helper(s) located at the flight line.
- 7. Under no circumstances may a pilot or other person touch a model aircraft in flight while it is still under power, except to divert it from striking an individual. This does not apply to model aircraft flown indoors.
- 8. RC night flying requires a lighting system providing the pilot with a clear view of the model's attitude and orientation at all times.
- 9. The pilot of a RC model aircraft shall:
  - (a) Maintain control during the entire flight, maintaining visual contact without enhancement other than by corrective lenses prescribed for the pilot.
  - (b) Fly using the assistance of a camera or First-Person View (FPV) only in accordance with the procedures outlined in AMA Document #550.